Listing of the Claims

1. (Currently Amended)   A device [10] comprising:

a controller [21];

a memory [22] coupled to the controller; and

an input interface [20] arranged to received at least two event signals [11],

wherein the controller is arranged to determine a global correlation for the at least two event signal over a first period of time, determine a local corrlation for the at least two event signals over a second period of time which is shorter than the first period of time, determine a deviation between a local correlation vector and a global correlation vector, determine an average deviation from the deviation and determine whether an artifact was detected in one of the at least two event signals.

2. (Currently Amended)   The device [10] according to Claim 1 wherein the device is a patient monitoring system.

3. (Currently Amended)   The device [10] according to Claim 2 wherein the at least two event signals [11] are patient monitored data signals.

4. (Currently Amended)   The device [10] according to Claim 3 further comprising an alarm indicator [40] coupled to the controller [21], the alarm indicator [40] being triggered if at least one of the event signals [11] crosses a preset threshold value and the controller [21] determines that no artifact was detected in the at least one event signal [11].

5. (Currently Amended)   The device [10] according to Claim 1 further comprising a memory [22] for recording the at least tow event signals [11].

6. (Currently Amended)   The device [10] according to Claim 1, wherein the device is a server forming part of a client-server network.

7. (Currently Amended) A method [Fig. 2] for detecting a signal artifact in an event signal, the method comprising the steps of:

receiving at least two event signals;

determining a global correlation for the at least two event signal over a first period of time;

determining a local corrlation for the at least two event signals over a second period of time which is shorter than the first period of time;

determining a deviation between a local correlation vector and a global correlation vector;

determining an average deviation from the deviation; and

determining whether an artifact was detected in one of the at least two event signals based upon the average deviation.

8. (Currently Amended) The method [Fig. 2] according to Claim 1 wherein the method is used with a patient monitoring system.

9. (Currently Amended) The method [Fig. 2] according to Claim 8 wherein the at least two event signals are patient monitored data signals.

10. (Currently Amended) The method [Fig. 2] according to Claim 9 further comprising the step of providing an alarm indication if at least one of the event signals crosses a preset threshold value and no artifact was detected in the at least one event signal.

11. (Currently Amended) The method [Fig. 2] according to Claim 7 further comprising the step of recording the at least two event signals.

12. (Currently Amended) The method [Fig. 2] according to Claim 7, wherein the method is used in a server forming part of a client-server network.

13. (Currently Amended) A system [10] for detecting a signal artifact in an event signal [11], comprising:

means [20] for receiving at least two event signals [11];

means [21] for determining a global correlation for the at least two event signal over a first period of time;

means [21] for determining a local corrlation for the at least two event signals over a second period of time which is shorter than the first period of time;

means [21] for determining a deviation between a local correlation vector and a global correlation vector;

means [21] for determining an average deviation from the deviation; and

means [21] for determining whether an artifact was detected in one of the at least two event signals based upon the average deviation.

14. (Currently Amended) The system [10] according to Claim 13 wherein the system is a patient monitoring system.

15. (Currently Amended) The system [10] according to Claim 14 wherein the at least two event signals [11] are patient monitored data signals.